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THE fifth conference of the International Union against Tuberculosis will open in Washington September 29th, 1926, with the concourse of the thirty nations who comprise its membership. The delegates are among the most distinguished scientists and research experts in the world.

Italy will send three men in the persons of Dr. Gaetano Ronzoni, Professor of Special Medical Pathology at the University of Milan; Dr. Vittorio Ascoli, Professor of the Medical Clinic at the University of Rome, and Dr. G. B. Roatta, Director of the Dispensaries of Florence. Others may yet follow, as invitations have been extended to some eminent surgeons, among whom is Dr. Vittorio Putti, Professor of Orthopedy at the University of Bologna, well known for his lectures here. The great work done by Italy in the scientific, social, economic and legislative field on tuberculosis, is very little known in the United States by the public in general, although her contributions in the fight against the white plague are familiar to the American medical world through the important publications of the "Federazione Nazionale Italiana per la lotta contro la Tubercolosi."

Many intelligent American travelers interested in the welfare of Italy are certainly familiar with the popular Seaside Sanatoria and Mountain Stations for Children founded in the middle of last century in Tuscany by Dr. Barellai, who started modestly with a small colony of children afflicted with tuberculosis, and with their development at the seashore of Viareggio on the Mediterranean Riviera. The effect of a few weeks' bathing and sun exposure was so marvelous that in time regular institutions were organized by charitable and philanthropic citizens all over Italy. Permanent institutions are at present operating regularly under the patronage of public and private organizations with remarkable success.

The large amount of scientific work done on the subject of tuberculosis in the various schools of medicine of Italian universities of late and the numerous works published originally in that country or translated from foreign authors, have introduced a somewhat confusing element in the minds of the practical physicians, overburdened by the difficulty of selecting a right method amid so many conflicting theories. The Scientific Editorial Institute of Milano, intending to facilitate the work of the practitioner, has published recently two large volumes on "Pulmonary Tuberculosis from the Clinical and Social Point of View," which have been received by the Italian medical fraternity with great favor and appreciation. The originality and the simplicity with which it faces so arduous a problem, and the systematic division of the subject matter in chapters on different aspects of the disease each treated by a specialist enjoying the reputation of being fully competent in the matter, make the work as complete as could be expected.

Pulmonary tuberculosis has been well known in its complexity from the biological and pathological aspects, but the disease has not been well studied and discussed from the clinical and social side. The Editorial Institute of Milano realized the necessity of such a work, and gathering the most competent men, gave to each one the special duty of treating the part in which he was considered most conversant.

A brief review of the work will give to the American public an idea of this important publication especially interesting at this opportune time, when the International Union against Tuberculosis is about to meet in Washington.

The book entitled Pulmonary Tuberculosis from the Clinical and Social Point of View, is published in two large volumes. The first volume was published in 1925, the second, more recently, in 1926. The work is edited by the "Societa anonima, Istituto editoriale scientifico di Milano, Italia." The two volumes were written under the direction of Dr. Umberto Carpi, Professor of special medical pathology at the University of Pavia, and Dr. Gaetano Ronzoni, also Professor of the same subject at the University of Milan, with the collaboration of sev-

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eral other professors, each one representing a special subject. The work is a synopsis of the complete history of pulmonary tuberculosis from the anatomical, physiological, pathological and therapeutic aspects. It also covers scientifically the clinical, social, and economical side of the problem. It summarizes for the benefit of the general practitioner all that has been written so extensively about a disease, which has been and is yet puzzling not only the medical profession, but the public at large.

The first volume, which deals with the etiology, pathogenesis, pathological anatomy and clinical aspects of tuberculosis, is divided in twelve chapters. The first one, written by Dr. Emilio Veratti, Professor of Bacteriology at the University of Pavia, is a brief historical review of the etiology and pathogenesis of tuberculosis, illustrated with some fine colored plates.

The second chapter, written by Dr. Achille Monti, Director of the Institute of Pathologic Anatomy at the University of Pavia, is abundantly illustrated, and deals entirely with his specialty. The third chapter is from Dr. Ferruccio Marcora, Professor of Special Medical Pathology at the University of Rome.

Dr. Benedetto Agazzi, Docent of Otorhinolaringology at the University of Milan, gives in Chapter IV a very careful exposition of the ways through which tuberculosis infection enters the respiratory organs, nose, mouth, tonsils, nasal cavities, pharynx, trachea, bronchi, bronchial cells, and finally the pulmonary tissues.

Dr. Umberto Carpi, above mentioned, in the fifth chapter on semeiology (symptomatology), reviews the different methods of examination and the various technics followed for the measurement of the thorax, percussion and auscultation. He explains all the methods of correct diagnosis, abundantly illustrating each point with colored plates.

Dr. Cesare Cattaneo, director of the Pediatric Clinic of Milan, one of the most competent men in that specialty, discusses in the sixth chapter, "Infantile Tuberculosis," the etiology, frequency, different ways of invasion, different forms, difficulty of diagnosis, with many illustrations.

Dr. Gaetano Ronzoni in the seventh chapter devotes his attention to the "Principal Clinical Varieties of Pulmonary Tuberculosis in Adults," with proper classification and distinctive diagnosis between acute, chronic, and miliary tuberculosis, with demonstrations by radiographic views. This chapter is an important guide to

the diagnosis and classification of different forms and stages of the disease. Dr. Enzo Piceni of the Social Clinical Institute against tuberculosis of Milan wrote the eighth chapter, in which he deals with the "Principal Symptoms and Many Complications in Pulmonary Tuberculosis." He describes the different signs of the modified pulmonary functions, the examination of the expectoration, hemophtysis, the functional disturbance of other organs, especially the heart, the kidneys, the liver, the spleen, the genital organs of the male and female, and the functional alteration of the nervous system and the complications in syphilities, arthritics, diabetic patients, including the intimate connection with alcoholism.

Dr. Azzo Varisco, primary of the Hospital of Udine, treats of tuberculosis of the pleura and mediastine in the ninth chapter. He shows in some interesting illustrations how radioscopy can be of a great help in some difficult diagnoses. This chapter is followed by the tenth one of Dr. Vittorio Ronchetti, primary of the civic Hospital of Milan, who reviews in brief the enormous difficulty encountered in trying to make a correct diagnosis of pulmonary tuberculosis and its complications.

Dr. Celestino Gozzi, director of the Bacteriologic laboratory of Milan, in the eleventh chapter, after describing in detail the different ways of examining the expectoration, with colored illustrations showing the various aspects of microscopic diagnosis, reviews the chemical reaction of the tuberculous sputum and the various methods of skin reaction by inoculation. Examining the different methods used in the indirect diagnosis of tuberculosis, he mentions the application of tuberculin, the reaction from different serums, the agglutination, the precipitine, the opsonic index, and different forms of pseudotubercular cases.

The twelfth and last chapter of its first volume is written by Doctor Felice Perussia, Professor of Medical Radiology at the University of Milan, who after presenting the radiographic description of a normal chest, passes in review the different parts of the respiratory system in relation to pulmonary tuberculosis. He uses an abundance of very clear radiographic plates of the chest. He relates the different aspects of pulmonary tuberculosis according to the various stages of clinical and pathological processes.

The second volume of "Pulmonary Tuberculosis from Clinical and Social Point of View," is divided in fourteen chapters and deals with treatment, social and preventive measures and legislation.

The first, by Dr. Luigi Mangiagalli, Professor of Gynecology and Obstetrics at the University of Milan, one of the most eminent promoters of scientific studies in Italy, dwells upon the most delicate complication of pulmonary tuberculosis and pregnancy. This social problem, which involves theoretically infection and transmission of the germ as well as heredity, is a grave problem for the man of science as well as for the practical man. The writer, with many statistical references, numerous quotations from national and foreign studies, and extended personal experience comes to some very practical conclusions, with a conservative view of the whole question. The climatic treatment of pulmonary tuberculosis is the subject of the second chapter by Dr. Marcello Bertolini, Director of the Popular Sanatorium Umberto Primo, near Sondrio. It is a careful study of climate in general and in particular. The author discusses geographic and topographic considerations, altitude, humidity, temperature, and the general environment.

Dr. Ferdinando Micheli, Professor of the Medical Clinic at the University of Turin, in the third chapter, writes about immunotherapy in general, its nature, its character, its relation to the vaccine-prophylaxis, vaccino-therapy, and the mechanism of tuberculin-therapy, giving the practical direction for the application of different methods. His assistant, Dr. Carlo Genna, in the fourth chapter, gives in detail special rules for vaccino-therapy of tuberculin. His conclusions are deducted from experimental and practical laboratory and clinic work and show the proper time for the application and the doses to be used.

Scientifically more positive in its conclusion is Dr. Pietro Rondoni, director general of the Pathologic Institute of Milan in the fifth chapter, which is a study of plasmatic alteration of the blood in fever from pulmonary tuberculosis.

Dr. Carlo Arrigoni, director of the "Europa" sanatorium at Arco, near Trento, in the sixth chapter, gives an extensive description of the general and symptomatic drug therapy of pulmonary tuberculosis, with abundant statistics of the different remedies and the prescriptions according to cases and the conditions of the patients. These numerous prescriptions and the illustrations are a real help to the practitioner in the treatment of the disease. The seventh chapter is by Dr. A. Zironi, director of the research

institute and professor of microbiology, University of Milan, "Chemotherapy of Tuberculosis" is the theme of Dr. Zironi's paper. He describes the various metallic combinations used in the treatment of tuberculosis, and the chemical products used for disinfection by introducing them into the circulation.

A comparatively recent method of treatment of pulmonary tuberculosis is well and extensively described in the eighth chapter by Dr. Umberto Carpi referring to the discovery of Dr. Carlo Forlanini, who as early as 1882, while professor at the University of Pavia, proposed to immobilize the diseased lung by injecting sterilized air into the pleural cavity. The method of Forlanini was utilized in the last war by artificial pneumothorax in thoraco-pulmonary wounds (Morelli-Carpi), and in the treatment of croupal pneumonia (Friedman-David) and even in bronchopneumonia (Bernard). Pneumo-thorax has been used also as a diagnostic means with the Roentgen ray, with the purpose of locating gun-bullets in the pleural cavity or endo-thoracic tumors. The illustrations in Dr. Carpi's article are a great help to the general practitioner, especially in that part where he refers to the various instruments devised for the purpose not only by Forlanini, but also by his followers, Brauer, Kuss, Morelli, Brescia and Carpi, with many successive modifications introduced according to the special condition of the lungs and pleuras. In cases in which the pleural adhesions would prevent the complete collapse of the lung, a galvano-caustic knife is used for the purpose of detaching the adhesions to free the lung and permit the necessary collapse. Dr. Giovanni Castiglioni, professor of surgical pathology at the University of Milan, writes the ninth chapter in which he reviews all the thoracic surgery of the last twenty years with mention of Jacobaus, Brauer, Roswell-Park, Mauclaire, Tuffier, Turban, Landerer. His practical illustrations describe the various methods of operations, giving special details on the technic of each author and of each

Dr. Ernesto Bertarelli in the tenth chapter writes of pulmonary tuberculosis as a social disease, its frequency, its duration, its importance as a contagious disease, its relation to race stock. He analyzes theories regarding the predisposition of tuberculosis in certain races and discusses especially the effects of congestions in cities. He makes a special study of the housing problem, and deals with the workingman in relation to

climate and location, the alimentation, emigration, education, military service, alcoholism and other causes of predisposition to infectious diseases.

It is natural that a social disease should call for a social defense or control, and this is well discussed in the eleventh chapter by Dr. Gaetano Ronzoni, who after stating the necessity of such a defense reviews the different laws which regulate it, based on biologic and clinical experience. The fundamental law that dominates the problem from the practical point of view of social defense is this: "Human tuberculosis is not a hereditary, but an acquired disease. It is transmitted by the patient to another person, and habitually after prolonged contact. It is acquired in the majority of cases in the first years of life, and by familiar contagion. It is generally admitted that the tuberculous mother is the most frequent transmitter of the disease.'

The control of tuberculosis should be organized by special associations devoted to the enforcement and execution of the protective laws, especially those dealing with the protection of children. International provision for mutual protection, in which the medical profession should take a very active part is also recommended. Such preventive measures must be promoted by special organizations, and by dispensaries for the treatment and study of the social problem. Some fine illustrations of Italian sanatoria demonstrate the active part that the public and the medical fraternity take in trying to diminish the ravage of the disease.

To complete the article of Dr. Ronzoni comes the twelfth chapter by Guido Salvini, director of the antituberculosis and prophylactic dispensary of the city of Milan. In the active campaign against tuberculosis, taking into consideration the large percentage of the infected area and persons it is essentially necessary to organize "prophylatic dispensaries" first, for the purpose of co-ordinating efficiently the relief given to the families of the poor, and second for the purpose of giving to the dispensaries a technical organization. Dr. Salvini considers every point of the working of these dispensaries, from their initial investigation, their statistical files and records,

their educational methods, the medical problem, the lay personnel for relief, the directing physicians, the home visiting agents and the dispensaries in their prophylatic working activities and their practical success. The problem of disinfection is also discussed in its practical application.

Dr. Giovanni Allevi in the thirteenth chapter discusses pulmonary tuberculosis in relation to the working man. He points out the influence of industrialism in the diffusion of the disease and examines the various theories in connection with the spreading of the disease. He also gives due consideration to pulmonary tuberculosis as an industrial disease, a delicate and difficult question, which involves legal questions of compensation.

More explicit is the fourteenth chapter, written by Dr. Enrico Ronzani, in which the actual legislation against tuberculosis in Italy is well discussed. As early as December 22, 1888, a law was enacted compelling the reporting of infectious diseases in Italy, not only by physicians, but also by orphan asylums, hospitals, colleges, convents, hotels, boarding houses. This very important law was followed by many successive regulations which were afterward gathered in a special law, dated February 3, 1901, well known also in foreign countries, in which precise and severe dispositions were adopted against tuberculosis with great benefit to the public health.

Soon after the war, July 24, 1919, in consideration of the increased number of tuberculous patients, due to the unfortunate conditions brought about by the long struggle, a special law was enacted providing for the financing of hospitals up to 1927. The provinces and the municipalities in need of protection against tuberculosis, promote institutions for the prevention and cure of the disease, which were on December 23, 1923, by the National Government raised to legal corporations under the name of "Consorzi antitubercolari." These national consortiums against tuberculosis are a great credit to the young nation, and prove her great activity not only in the scientific field, but also in the practical application of all the means suggested by science in her strenuous fight against tuberculosis.

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